J. CHENOWETH.

WATER-ELEVATOR.

No. 174,479. Patented March 7, 1876.

Fig. 1

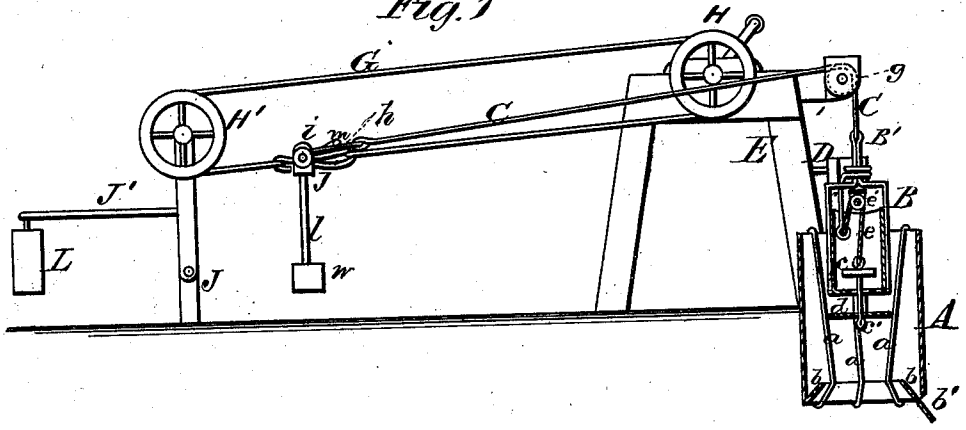


Fig. 2

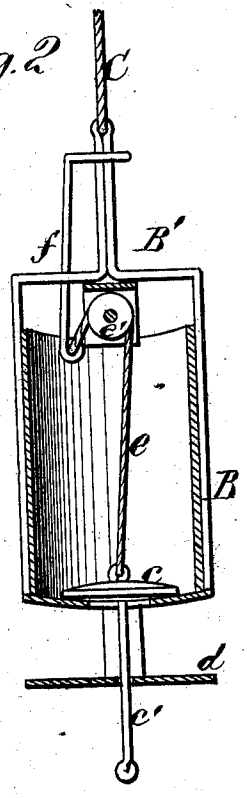
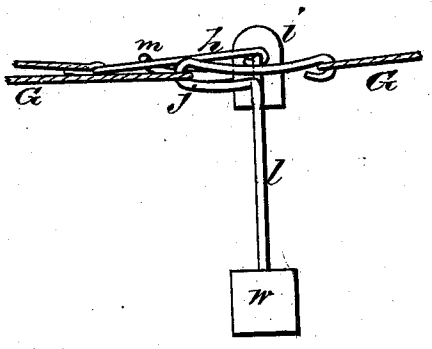


Fig. 3



WITNESSES

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JOSEPH CHENOWETH, OF OMAHA, NEBRASKA.

IMPROVEMENT IN WATER-ELEVATORS.

Specification forming part of Letters Patent No. **174,479**, dated March 7, 1876; application filed February 12, 1876.

To all whom it may concern:

Be it known that I, JOSEPH CHENOWETH, of Omaha, in the county of Douglas and State of Nebraska, have invented a new and valuable Improvement in Water-Elevators; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal vertical section and elevated side view of my water-elevator, and Fig. 2 is a vertical central sectional view of the bucket. Fig. 3 is a detail view thereof.

This invention has relation to means for elevating water from wells; and the nature of my invention consists, mainly, in giving the up and down movements to the bucket by means of a gravitating device attached to an endless traveling rope or chain, to which device the bucket rope or chain is fastened, as will be hereinafter explained.

The invention consists, further, in novel means for discharging water from the bucket when the same is raised to the proper height, and also for guiding the bucket out of the well-curb, as will be hereinafter explained.

In the annexed drawings, A designates a cylindrical well-curb of greater diameter than the bucket, and *a* designate wires, which extend from the top of the curb to the inner edge of an annular gutter, *b*, at the bottom of the curb, from which gutter water is discharged through a spout, *b'*. The inclined wires *a* guide the bucket B out of the curb, and prevent it from being arrested by the annular gutter. The bucket B is of cylindrical form, with an opening through its bottom, provided with a valve, *c*, and below the bottom of the bucket is a horizontal disk, *d*, which will spread the water and discharge it into the trough *b*. The disk *d* also serves as a guide for the valve-stem *c'*. A rope or chain, *e*, is attached to the valve *c*, carried up and passed over a pulley, *e'*, and attached to a tripping-rod, *f*, which is guided by an extension of the bail B'. To the upper end of the bail-extension a rope or chain, C, is attached, and when the bucket is raised to the proper height, the rod *f* will be pressed down by an eye which is formed on a loaded arm, D, thus opening the valve *c*, and discharging the water from the bucket into the trough *b*. The rope or chain C is passed over a pulley, *g*, on a bracket which is secured to a frame, E, and attached to a bail, *h*, which is pivoted to a block, *i*, on a hanger, *j*. The hanger *j* is suitably bent and attached to an endless rope or chain, G, which is passed around two grooved pulleys, H H.' To the block *i* a rod, *l*, is secured, carrying a weight, *w*, which keeps the block upright at all times. A short arm, *m*, is also fixed into the block, which prevents the pivoted bail *h* from being thrown over the said block. On the shaft of pulley H a spur-wheel (not shown) will be keyed, with which a windmill or other motor can be geared for running the machine. The shaft of the pulley H' has its bearings in the upper jointed section of a standard, J, to which section an arm, J', is rigidly fixed, carrying a weight, L, which keeps the rope or chain C under proper tension.

What I claim as new, and desire to secure by Letters Patent, is—

1. The rope or chain C, attached to the bucket-bail, and also to the bail *h*, in combination with pulley *g*, block *i*, hanger *j*, arm *m*, rod *l*, weight *w*, and endless rope or chain G, substantially as described.

2. The tripping-rod *f*, rope or chain *e*, pulley *e'*, and valve *c*, in combination with the gravitating-arm D and well-bucket B, as set forth.

3. In combination with the disk *d* and well-bucket, having a bottom vent, the guide-rods *a* and annular receiving-gutter *b*, substantially as set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOSEPH CHENOWETH.

Witnesses:

GEORGE KINNEY,

OSCAR BOLINS.